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CENTRAL FAX CENTER

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AMENDMENTS TO THE SPECIFICATION:

At page 7, lines 5-10, please amend the following paragraph of the specification as follows:

In order to achieve the above-mentioned object, a band control device of the present invention ~~according to claim 1~~ comprises: a controller for aggregating a plurality of physical links into a single logical link, and a distributor for distributing a traffic to a sub-logical link into which specified ones of the physical links in the logical link are aggregated so as to meet a specified condition of the traffic.

At page 8, lines 26- 28, please amend the following paragraph of the specification as follows:

Also, in the present invention ~~of claim 2~~, the distributor may comprise a traffic monitor for monitoring a traffic amount which meets the specified condition, and a manager for assigning the physical links of a number corresponding to the traffic amount to the sub-logical link.

At page 9, lines 14-18 , please amend the following paragraph of the specification as follows:

Also, in the present invention ~~of claim 3~~, when detecting that the traffic amount becomes smaller than a predetermined value during a predetermined period, the traffic monitor may release an aggregation of the sub-logical link to assign no sub-logical link exclusively used for the traffic which meets the specified condition

At page 10, lines 19-21 , please amend the following paragraph of the specification as follows:

Therefore, in the band control device of the present invention ~~according to claim 4~~, the controller may transmit/receive a message for establishing the sub-logical link to/from an opposite controller.

At page 10, lines 27- 28, please amend the following paragraph of the specification as follows:

Also, in the present invention ~~of claim 5~~, the controller may relay the message to a subsequent apparatus.

At page 11, lines 16- page 14 line 17, please amend the specification as follows:

In the present invention ~~of claim 6~~, when a failure occurs in the physical link not aggregated into the sub-logical link for example, the state can be avoided where a traffic except the traffic which meets a specified condition can not be communicated.

Also, in the present invention ~~of claim 7~~, the controller may return a message for establishing a sub-logical link port having been established based on the received message as a return sub-logical link port, whereby a bidirectional sub-logical link may be established in order to guarantee the band of the traffic which meets the specified condition.

【 0043 】

Also, in the present invention ~~of claim 8~~, the controller may return a response message for the received message, whereby the communication whose band is guaranteed may be reliably achieved between the end apparatuses.

Also, in the present invention of ~~claim 9~~, the controller may return, in response to the message requesting the establishment of the sub-logical link, a message rejecting the request.

【 0044】

Also, in the present invention of ~~claim 10~~, when receiving the response message, the controller may commence a communication of the traffic which meets the specified condition, whereby the communication may be reliably commenced.

Also, in the present invention of ~~claim 11~~, when a band of the sub-logical link requested by the received message is larger than an assignable band of a sub-logical link in the subsequent apparatus, the controller may discard the message and may return an error message, whereby the occurrence of the sub-logical link which becomes a bottleneck on a route may be avoided.

【 0045】

Also, in the present invention of ~~claim 12~~, a scheduler for transmitting a traffic, with a priority control, to the subsequent apparatus may be provided, and the controller may instruct the scheduler to transmit the traffic which meets the specified condition with a priority, and transmit a message notifying a request band of the traffic to the subsequent apparatus, whereby the band of the traffic which meets the specified condition in the link may be guaranteed by the scheduler when a single link having a large band on the route exists for example.

【 0046】

Also, in the present invention of ~~claim 13~~, when a communication of the traffic which meets the specified condition is completed, the controller may transmit a message requesting an establishment release of the sub-logical link corresponding to the traffic, thereby preventing the traffic which meets the specified condition from occupying the band more than needed.

【 0047】

Also, in the present invention of ~~claim 14~~, when receiving the message requesting the establishment release, the controller may relay the establishment release request message to a subsequent apparatus.

Also, in the present invention of ~~claim 15~~, a traffic monitor for monitoring a traffic amount which meets the specified condition may be further provided, and the controller may release the establishment of the sub-logical link when the traffic amount becomes smaller than a predetermined amount. It is to be noted that the traffic monitor of claim 2 may be used as the traffic monitor.

【 0048】

Also, in the present invention of ~~claim 16~~, when the physical link included in the sub-logical link degenerates and no physical link substituted for the degenerated physical link can be secured, the controller may transmit a message requesting that a number of physical links included in the sub-logical link should be decreased, whereby the case where the physical link occupied by the sub-logical link degenerates by a failure on a route or the like, for example, may be attended.

【 0049】

Also, in the present invention of ~~claim 17~~, when no physical link exists since the physical link excluded in the sub-logical link is degenerated, the controller may transmit a message requesting that a number of physical links included in the sub-logical link should be decreased, whereby the state may be avoided where the traffic except the traffic which meets a specified condition can not communicate.

【 0050】

Also, in the present invention ~~of claim 18-20~~, a traffic monitor for monitoring an amount of a traffic except the traffic which meets the specified condition may be further provided, and the controller may decrease a number of physical links included in the sub-logical link when the traffic amount becomes larger than a predetermined amount, and may output a message requesting that the number should be decreased. When receiving the number decrease request message, the controller may relay the message to a subsequent apparatus when it exists, and may decrease the number of physical links included in a corresponding sub-logical link when the apparatus does not exist, whereby the case where the traffic except the traffic which meets the specified condition increases may be attended.

【 0051】

Also, in the present invention ~~of claim 21~~, when receiving a message requesting an establishment of a sub-logical link different from the sub-logical link already established and no requested band can be secured, the controller may return an error message, thereby preventing the physical link included in the sub-logical link already established from being overlapped with another sub-logical link.

【 0052】

Furthermore, in the present invention ~~of claim 22~~, when receiving the error message, a source controller of the establishment request message may transmit again the establishment request message after a standby for a fixed period.

Also, in the present invention ~~of claim 23~~, when a plurality of sub-logical links are established in the single logical link, the controller may determine a sub-logical link for decreasing a number of physical links by a priority of the sub-logical link.

【 0053】

Also, in the present invention of ~~claim 24~~, the traffic from an opposite apparatus may be received by a collector.